



Attorney Docket No. LeA 33820

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Haynes, et al.

Group Art Unit: 1626

Serial No: 09/743,827

Examiner: Wright, S.

Filed: 07/31/2001

For: Antiparasitic Artemisinin Derivatives (Endoperoxides)

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CERTIFICATION OF MAILING UNDER 37 C.F.R. 1.8(a)

I hereby certify that this correspondence and any papers referred to as attached are being deposited, on the date shown below, with the United States Postal Service, with sufficient postage, as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: JUN 20 2003

Beatriz Alviz

RESPONSE TO RESTRICTION REQUIREMENT

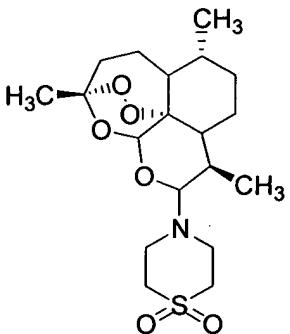
Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

This is in response to the Office Action dated 03/21/2003. In response to the restriction requirement, applicants elect the following specific embodiment (example 7) for further prosecution in this application:



This is in accordance with the examiner's statement that the applicants would be permitted to choose to elect a single invention by identifying a specific embodiment not listed in the exemplary groups of the invention identified by the examiner in the restriction requirement, and the examiner would endeavor to group the same.

The examiner has maintained that the present claims lack unity of invention under PCT Rule 13.1 and 13.2. The examiner is mistaken, as proven by the discussion presented below. The claims of this application clearly satisfy the unity of invention requirements of the PCT.

Unity of Invention

An international application must relate to one invention only, or, if there is more than one invention, those inventions must be linked so as to form a single general inventive concept (Rule 13.1). Inventions are considered linked so as to form a single general inventive concept only when there is a technical relationship involving one or more of the same or corresponding "special technical features". The expression "special technical features" means those technical features that define a contribution which each of the inventions, considered as a whole, makes over the prior art (Rule 13.2).

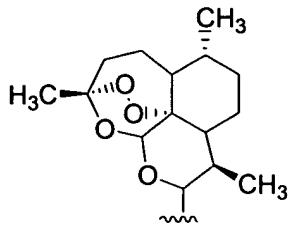
Annex B of the PCT Administrative Instructions explains the method for determining unity of invention contained in Rule 13.2 in greater detail with respect to three particular situations: (i) combinations of different categories of claims, (ii) Markush practice, and (iii) intermediate and final products.

Markush practice is dealt with in Rule 13.2 Part 1(f) of Annex B of the PCT Administrative Instructions. In "Markush practice", a single claim defines alternatives, chemical or non-chemical. The requirement of a technical interrelationship and the same or corresponding special technical features as defined in Rule 13.2 are considered to be met when the alternatives are of a similar nature. When the Markush grouping is for alternatives of chemical compounds, they are regarded as being of a similar nature if the following criteria are fulfilled:

- (A) all alternatives have a common property or activity, and
- (B)(1) a common structure is present, i.e., a significant structural element is shared by all of the alternatives, or
- (B)(2) in cases where the common structure cannot be the unifying criteria, all alternatives belong to a recognized class of chemical compounds in the art to which the invention pertains.

The examples provided in Annex B show that the significant structural element which is shared by all the alternatives is not required to be the contribution that each of the inventions makes over the prior art. Commonality is sufficient.

In the present application, each of the claimed compounds is a derivative of artemisinin and has the significant structural element shown by the structural formula below:



Only the group "Y" of general formula (I) is variable. The application teaches that these materials are active against parasites of the genera Plasmodium, Neospora and Eimeria.

As the claimed materials have a common property or activity, and a common structural element, it is deemed that the requirements for unity of invention are met. In addition, the claimed compounds belong to a recognized class of chemical compounds, namely, they are derivatives of artemisinin, thereby satisfying the unity of invention requirement in a second way. Accordingly, it is deemed that the restriction requirement imposed by the examiner is not proper.

Respectfully submitted,

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